What is claimed is:

1. A dynamic random access memory (DRAM) module, comprising:

one or more memory devices for storing data; and

a parallel decompression engine for decompressing compressed data, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

2. The DRAM module of claim 1, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

3. The DRAM module of claim 1, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

4. The DRAM module of claim 1, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

5. The DRAM module of claim 1, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

6. The DRAM module of claim 5, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

7. The DRAM module of claim 1, wherein the DRAM module is a Synchronous Dynamic Random Access Memory (SDRAM) module.

8. The DRAM module of claim 1, wherein the DRAM module is a Rambus Synchronous Dynamic Random Access Memory (RDRAM) module.

9. A device comprising:

a processor; and

a system memory comprising one or more dynamic random access memory (DRAM) modules coupled to the processor and operable to store data received from the processor;

wherein at least one of the one or more DRAM modules includes an embedded parallel decompression engine for decompressing compressed data, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

10. The device of claim 9, wherein the one or more DRAM modules are Synchronous Dynamic Random Access Memory (SDRAM) modules.

11. The device of claim 9, wherein the one or more DRAM modules are Rambus Synchronous Dynamic Random Access Memory (RDRAM) modules.

12. A dual in-line memory module (DIMM), comprising:

one or more memory devices for storing data; and

a parallel decompression engine for decompressing compressed data, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

13. The DIMM of claim 12, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

14. The DIMM of claim 12, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

15. The DIMM of claim 12, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and

data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

16. The DIMM of claim 12, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

17. The DIMM of claim 16, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

18. A device comprising:

a processor; and

a system memory comprising one or more dual in-line memory modules (DIMMs) coupled to the processor and operable to store data received from the processor;

wherein at least one of the one or more DIMMs includes an embedded parallel decompression engine for decompressing compressed data, wherein the compressed data

comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

19. A processor, comprising:

one or more registers;

an execution core; and

a parallel decompression engine for decompressing compressed data, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

20. The processor of claim 19, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

21. The processor of claim 19, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

22. The processor of claim 19, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

23. The processor of claim 19, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

24. The processor of claim 23, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

25. A device comprising:

a processor; and

memory coupled to the processor and operable to store data received from the processor;

wherein the processor includes an embedded parallel decompression engine for decompressing compressed data transferred to or from the memory, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

26. A cache controller, comprising:

cache memory control logic for controlling a cache memory; and

a parallel decompression engine for decompressing compressed data transferred to or from the cache memory, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

27. The cache controller of claim 26, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

28. The cache controller of claim 26, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

29. The cache controller of claim 26, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

30. The cache controller of claim 26, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

31. The cache controller of claim 30, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

32. A device comprising:

a processor;

cache memory which stores data used by said processor for executing one or more applications;

a cache controller coupled to the cache memory and the processor, wherein the cache controller performs cache memory control functions for the cache memory, wherein the cache controller includes a parallel decompression engine for decompressing compressed data transferred to or from the cache memory, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

33. A bus bridge, comprising:

bus bridge logic for bridging a first bus to a second bus; and

a parallel decompression engine for decompressing compressed data transferred between the first bus and the second bus, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

34. The bus bridge of claim 33, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

35. The bus bridge of claim 33, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

36. The bus bridge of claim 33, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

37. The bus bridge of claim 33, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

38. The bus bridge of claim 37, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

39. A device comprising:

a first bus;

a second bus; and

a bus bridge for bridging the first bus to the second bus, wherein the bus bridge includes an embedded parallel decompression engine for decompressing compressed data transferred between the first bus and the second bus, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

40. A solid state storage device, comprising:

one or more memory boards for storing data;

a processor board operable to manage the storage of the data on the one or more memory boards;

a memory bus operable to couple the memory boards to the processor board;

an interface board operable to couple the solid state storage device to a host system for receiving and sending the data; and

a parallel decompression engine for decompressing compressed data, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

41. The solid state storage device of claim 40, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

42. The solid state storage device of claim 40, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

43. The solid state storage device of claim 40, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

44. The solid state storage device of claim 40, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

45. The solid state storage device of claim 44, further comprising copying a second select being generated for the first token to the first select, wherein the second select

points to one of a symbol in the combined history window or a data byte in the combined history window.

46. A computer system comprising:

a processor;

system memory coupled to the processor; and

a solid state storage device operable to store data received from one or more of the processor and the system memory, wherein the solid state storage device comprises:

one or more memory boards for storing the data; and

an embedded parallel decompression engine for decompressing compressed data, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

47. An intelligent device comprising:

a processor;

a parallel decompression engine for decompressing compressed data within the intelligent device, wherein the compressed data comprises a compressed representation of

uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

48. The intelligent device of claim 47, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

49. The intelligent device of claim 47, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

50. The intelligent device of claim 47, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

51. The intelligent device of claim 47, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

52. The intelligent device of claim 51, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

53. A network hub comprising:

hub logic for receiving data from one or more sources on the network and sending the data to one or more destinations on the network, wherein the data includes compressed data;

a parallel decompression engine for decompressing the compressed data after said receiving, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

54. The network hub of claim 53, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

55. The network hub of claim 53, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

56. The network hub of claim 53, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

57. The network hub of claim 53, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

58. The network hub of claim 57, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

59. A network switch comprising:

switch logic for selecting paths for sending data to destinations on the network;

a parallel decompression engine for decompressing compressed data prior to said sending, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

60. The network switch of claim 59, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

61. The network switch of claim 59, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

62. The network switch of claim 59, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

63. The network switch of claim 59, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

64. The network switch of claim 63, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

65. A network bridge comprising:

bridge logic for connecting two or more networks;

a parallel decompression engine for decompressing compressed data received on one of the two or more networks prior to transferring the data to at least one other of the two or more networks, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

66. The network bridge of claim 65, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

67. The network bridge of claim 65, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

68. The network bridge of claim 65, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

69. The network bridge of claim 65, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to

a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

70. The network bridge of claim 69, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

71. A network router comprising:

router logic operable to route data on one or more networks;

a parallel decompression engine for decompressing compressed data in transit through the router, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

72. The network router of claim 71, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

73. The network router of claim 71, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

74. The network router of claim 71, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

75. The network router of claim 71, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

76. The network router of claim 75, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

77. A network brouter comprising:

bridge logic operable to connect two or more networks;

router logic operable to route data on the two or more networks;

a parallel decompression engine for decompressing compressed data in transit through the brouter, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

78. The network brouter of claim 77, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

79. The network brouter of claim 77, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

80. The network brouter of claim 77, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

81. The network brouter of claim 77, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

82. The network brouter of claim 81, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

83. A multiplexer comprising:

multiplexing logic operable to:

receive a plurality of signals from one or more source devices;

multiplex the plurality of signals to form one multiplexed signal; and

send the multiplexed signal to one or more destination devices;

a parallel decompression engine for decompressing compressed data in the plurality of signals prior to said sending, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

84. The multiplexer of claim 83, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

85. The multiplexer of claim 83, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

86. The multiplexer of claim 83, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and

data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

87. The multiplexer of claim 83, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

88. The multiplexer of claim 87, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

89. A demultiplexer comprising:

demultiplexing logic operable to:

receive a multiplexed signal from a source device;

demultiplex the multiplexed signal to produce a plurality of signals; and

send the plurality of signals to one or more destination devices;

a parallel decompression engine for decompressing compressed data in the plurality of signals prior to said sending, wherein the compressed data comprises a compressed

representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

90. The demultiplexer of claim 89, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

91. The demultiplexer of claim 89, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

92. The demultiplexer of claim 89, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

93. The demultiplexer of claim 89, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

94. The demultiplexer of claim 93, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

95. A terminal server comprising:

a plurality of ports operable to couple a plurality of devices to the terminal server;

a port operable to couple a network to the terminal server;

data transfer logic operable to transfer data between the network and the plurality of devices; and

a parallel decompression engine for decompressing compressed data during said transferring the data between the network and the plurality of devices, wherein the compressed data comprises a compressed representation of uncompressed data, the

uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

96. The terminal server of claim 95, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

97. The terminal server of claim 95, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

98. The terminal server of claim 95, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

99. The terminal server of claim 95, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

100. The terminal server of claim 99, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

101. A network interface card (NIC), comprising:

network interface logic for interfacing a device to a network;

a parallel decompression engine for decompressing compressed data transferred between the device and the network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

102. The NIC of claim 101, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

103. The NIC of claim 101, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

104. The NIC of claim 101, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

105. The NIC of claim 101, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

106. The NIC of claim 105, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

107. A computer system comprising:

a processor;

system memory coupled to the processor; and

a network interface card (NIC) operable to couple the computer system to a network, wherein the network interface card includes an embedded parallel decompression engine for decompressing compressed data transferred between the computer system and the network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the data transferred between the computer system and the network includes one or more of data transferred between the system memory and the network and data transferred between the processor and the network;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

108. An Integrated Services Digital Network (ISDN) adapter comprising:

logic for interfacing a device to an Integrated Services Digital Network; and

a parallel decompression engine for decompressing compressed data transferred between the device and the ISDN, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

109. The ISDN adapter of claim 108, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

110. The ISDN adapter of claim 108, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

111. The ISDN adapter of claim 108, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

112. The ISDN adapter of claim 108, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

113. The ISDN adapter of claim 112, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

114. A computer system comprising:

a processor;

system memory coupled to the processor; and

an Integrated Services Digital Network (ISDN) adapter operable to couple the computer system to an Integrated Services Digital Network, wherein the ISDN adapter includes an embedded parallel decompression engine for decompressing compressed data transferred between the computer system and the Integrated Services Digital Network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the data transferred between the computer system and the Integrated Services Digital Network includes one or more of data transferred between the system memory and the Integrated Services Digital Network and data transferred between the processor and the Integrated Services Digital Network;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

115. An asynchronous transfer mode (ATM) adapter comprising:

logic for interfacing a device to an ATM network; and

a parallel decompression engine for decompressing compressed data transferred between the device and the ATM network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

116. The ATM adapter of claim 115, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

117. The ATM adapter of claim 115, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

118. The ATM adapter of claim 115, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

119. The ATM adapter of claim 115, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

120. The ATM adapter of claim 119, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

121. A computer system comprising:

a processor;

system memory coupled to the processor; and

an asynchronous transfer mode (ATM) adapter operable to couple the computer system to a network that supports ATM, wherein the ATM adapter includes an embedded

parallel decompression engine for decompressing compressed data transferred between the computer system and the network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the data transferred between the computer system and the network includes one or more of data transferred between the system memory and the network and data transferred between the processor and the network;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

122. A modem comprising:

modem logic for interfacing a device to an analog data source;

a parallel decompression engine for decompressing compressed data transferred between the device and the modem, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

123. The modem of claim 122, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

124. The modem of claim 122, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

125. The modem of claim 122, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

126. The modem of claim 122, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

127. The modem of claim 126, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

128. A computer system comprising:

a processor;

system memory coupled to the processor; and

an modem operable to couple the computer system to an analog data source, wherein the modem includes an embedded parallel decompression engine for decompressing compressed data transferred between the computer system and the analog data source, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the data transferred between the computer system and the analog data source includes one or more of data transferred between the system memory and the analog data source and data transferred between the processor and the analog data source;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

129. A cable modem for connecting to a network via a cable service, comprising:

logic for coupling a device to a network via a cable service; and

a parallel decompression engine for decompressing compressed data transferred between the device and the network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

130. The cable modem of claim 129, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

131. The cable modem of claim 129, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

132. The cable modem of claim 129, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

133. The cable modem of claim 129, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

134. The cable modem of claim 133, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

135. The cable modem of claim 129, wherein the device is one of a television set and a computer system.

136. A computer system comprising:

a processor;

system memory coupled to the processor; and

a cable modem operable to couple the computer system to a network via a cable service, wherein the cable modem includes an embedded parallel decompression engine for decompressing compressed data transferred between the computer system and the network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the data transferred between the computer system and the network includes one or more of data transferred between the system memory and the network and data transferred between the processor and the network;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

137. A Digital Subscriber Line (DSL) adapter for interfacing a device to a Digital Subscriber Line, the DSL adapter comprising:

logic for interfacing the device to the Digital Subscriber Line; and

a parallel decompression engine for decompressing compressed data transferred between the device and the DSL, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

138. The DSL adapter of claim 137, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

139. The DSL adapter of claim 137, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

140. The DSL adapter of claim 137, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

141. The DSL adapter of claim 137, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

142. The DSL adapter of claim 141, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

143. A computer system comprising:

a processor;

system memory coupled to the processor; and

a Digital Subscriber Line (DSL) adapter operable to couple the computer system to a Digital Subscriber Line, wherein the DSL adapter includes an embedded parallel

decompression engine for decompressing compressed data transferred between the computer system and the Digital Subscriber Line, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the data transferred between the computer system and the Digital Subscriber Line includes one or more of data transferred between the system memory and the Digital Subscriber Line and data transferred between the processor and the Digital Subscriber Line;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

144. A network appliance comprising:

network interface logic for interfacing the network appliance to a network; and

a parallel decompression engine for decompressing compressed data transferred between the network appliance and the network, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

145. The network appliance of claim 144, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

146. The network appliance of claim 144, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

147. The network appliance of claim 144, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

148. The network appliance of claim 144, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

149. The network appliance of claim 148, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

150. A set-top box comprising:

logic for enabling a television set to serve as a user interface to the Internet;

logic for enabling the television set to receive and decode digital television (DTV) broadcasts; and

a parallel decompression engine for decompressing compressed data within the set-top box, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

151. The set-top box of claim 150, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

152. The set-top box of claim 150, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

153. The set-top box of claim 150, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

154. The set-top box of claim 150, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

155. The set-top box of claim 154, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

156. A digital-to-analog converter (DAC), comprising:

logic for converting a digital input to an analog output signal; and

a parallel decompression engine for decompressing compressed data in the digital input prior to said converting the digital input to the analog output signal, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

157. The digital-to-analog converter of claim 156, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

158. The digital-to-analog converter of claim 156, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

159. The digital-to-analog converter of claim 156, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

160. The digital-to-analog converter of claim 156, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to

a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

161. The digital-to-analog converter of claim 160, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

162. A computer system comprising:

a processor;

system memory coupled to the processor; and

a digital-to-analog converter (DAC) for converting a digital input to an analog output signal;

wherein the digital-to-analog converter is operable to receive the digital input from one or more of the processor and the system memory;

wherein the digital-to-analog converter includes an embedded parallel decompression engine for decompressing compressed data in the digital input prior to said converting the digital input to the analog output signal, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

163. An analog-to-digital converter (ADC), comprising:

logic for converting an analog input signal to a digital output; and

a parallel decompression engine for decompressing compressed data in the digital output after said converting the analog input signal to the digital output, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

164. The analog-to-digital converter of claim 163, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

165. The analog-to-digital converter of claim 163, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

166. The analog-to-digital converter of claim 163, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

167. The analog-to-digital converter of claim 163, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

168. The analog-to-digital converter of claim 167, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

169. A computer system comprising:

a processor;

system memory coupled to the processor; and

an analog-to-digital converter (ADC) for converting an analog input signal to a digital output;

wherein the analog-to-digital converter is operable to provide the digital output to one or more of the processor and the system memory;

wherein the analog-to-digital converter further includes an embedded parallel decompression engine for decompressing compressed data in the digital output after said converting the analog input signal to the digital output, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

170. A digital data reading device comprising:

a mechanism for reading digital data from a storage medium operable to store the digital data including compressed data; and

a parallel decompression engine for decompressing the compressed data after said reading, wherein the compressed data comprises a compressed representation of

uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

171. The digital data reading device of claim 170, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

172. The digital data reading device of claim 170, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

173. The digital data reading device of claim 170, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

174. The digital data reading device of claim 170, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

175. The digital data reading device of claim 174, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

176. The digital data reading device of claim 170, wherein the digital data reading device is a Compact Disk (CD) reader.

177. The digital data reading device of claim 170, wherein the digital data reading device is a CD-Recordable (CD-R) device.

178. The digital data reading device of claim 170, wherein the digital data reading device is a CD-Rewritable (CD-RW) device.

179. The digital data reading device of claim 170, wherein the digital data reading device is a Digital Audio Tape (DAT) device.

180. A computer system comprising:

a processor;

system memory coupled to the processor; and

a digital data reading device operable to read data including compressed data from a digital storage medium;

wherein the digital data reading device includes logic for transferring the data read from the digital storage medium to one or more of the processor and the system memory; and

wherein the digital data reading device further includes an embedded parallel decompression engine for decompressing the compressed data read from the digital storage medium, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

181. The computer system of claim 180, wherein the digital data reading device is a Compact Disk (CD) reader.

182. The computer system of claim 180, wherein the digital data reading device is a CD-Recordable (CD-R) device.

183. The computer system of claim 180, wherein the digital data reading device is a CD-Rewritable (CD-RW) device.

184. The computer system of claim 180, wherein the digital data reading device is a Digital Audio Tape (DAT) device.

185. A digital data recording device comprising:

input logic for receiving data from one or more sources;

recording logic for recording the received data digitally to a recordable medium; and

a parallel decompression engine for decompressing compressed data including compressed portions of the received data prior to said recording, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

186. The digital data recording device of claim 185, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

187. The digital data recording device of claim 185, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

188. The digital data recording device of claim 185, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

189. The digital data recording device of claim 185, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

190. The digital data recording device of claim 189, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

191. The digital data recording device of claim 185, wherein the digital data recording device is a CD-Recordable (CD-R) device.

192. The digital data recording device of claim 185, wherein the digital data recording device is a CD-Rewritable (CD-RW) device.

193. The digital data recording device of claim 185, wherein the digital data recording device is a compact disk (CD) recorder device.

194. The digital data recording device of claim 185, wherein the digital data recording device is a Digital Audio Tape (DAT) device.

195. A computer system comprising:

a processor;

system memory coupled to the processor; and

a digital data recording device coupled to the processor and the system memory and operable to record data digitally to a recordable medium;

wherein the digital data recording device includes logic for receiving the data for recording from one or more of the processor and the system memory; and

wherein the digital data recording device further includes an embedded parallel decompression engine for decompressing compressed data including compressed portions of the received data prior to said recording, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

196. The computer system of claim 195, wherein the digital data recording device is a CD-Recordable (CD-R) device.

197. The computer system of claim 195, wherein the digital data recording device is a CD-Rewritable (CD-RW) device.

198. The computer system of claim 195, wherein the digital data recording device is a compact disk (CD) recorder device.

199. The computer system of claim 195, wherein the digital data recording device is Digital Audio Tape (DAT) device.

200. An optical data recording device comprising:

input logic for receiving data from one or more sources;

recording logic for recording the received data optically to a recordable medium; and

a parallel decompression engine for decompressing compressed data including compressed portions of the received data prior to said recording, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

201. The optical data recording device of claim 200, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

202. The optical data recording device of claim 200, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

203. The optical data recording device of claim 200, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

204. The optical data recording device of claim 200, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

205. The optical data recording device of claim 204, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

206. The optical data recording device of claim 200, wherein the optical data recording device is a digital versatile disk (DVD) device.

207. A computer system comprising:

a processor;

system memory coupled to the processor; and

an optical data recording device coupled to the processor and the system memory and operable to record data optically to a recordable medium;

wherein the optical data recording device includes logic for receiving the data to be recorded from one or more of the processor and the system memory; and

wherein the optical data recording device further includes an embedded parallel decompression engine for decompressing compressed data including compressed portions of the received data prior to said recording, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols;

wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window;

generate uncompressed data comprising the plurality of symbols; and

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

208. The computer system of claim 207, wherein the optical data recording device is a digital versatile disk (DVD) device.

209. A personal digital assistant (PDA) comprising:

a memory operable to store data within the PDA; and

a parallel decompression engine for decompressing compressed data within the PDA including the data stored to the memory, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

210. The personal digital assistant of claim 209, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

211. The personal digital assistant of claim 209, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

212. The personal digital assistant of claim 209, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

213. The personal digital assistant of claim 209, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

214. The personal digital assistant of claim 213, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.

215. A cellular telephone comprising:

a memory for storing data within the cellular telephone;

a display operable to display the data; and

a parallel decompression engine for decompressing compressed data in or received by the cellular telephone including the data stored to the memory, wherein the compressed data comprises a compressed representation of uncompressed data, the uncompressed data having a plurality of symbols, wherein the parallel decompression engine is operable to:

receive the compressed data, wherein the compressed data comprises tokens each describing one or more uncompressed symbols;

examine a plurality of tokens from the compressed data in parallel in a current decompression cycle;

generate a plurality of selects in parallel in response to examining the plurality of tokens in parallel, wherein each of the plurality of selects points to a symbol in a combined history window; and

generate the uncompressed data comprising the plurality of symbols using the plurality of selects.

216. The cellular telephone of claim 215, wherein the parallel decompression engine is further operable to:

store the uncompressed plurality of symbols from the current decompression cycle in the combined history window.

217. The cellular telephone of claim 215, wherein said examining the plurality of tokens includes generating, for each token, size and count information and at least one of a data byte or index information; and

wherein said generating the plurality of selects in parallel uses the size and count information and at least one of the data byte or index information for each of the plurality of tokens.

218. The cellular telephone of claim 215, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a data byte in the combined history window in response to a first token indicating that uncompressed data represented by the first token is the data byte; and

generating a second select to point to a first symbol in the combined history window in response to a second token indicating that uncompressed data represented by the second token includes the first symbol in the combined history window.

219. The cellular telephone of claim 215, wherein the combined history window includes an uncompressed plurality of symbols from one or more previous decompression cycles and data bytes from the current decompression cycle, wherein said generating the plurality of selects in parallel comprises:

generating a first select to point to a first symbol being decompressed from a first token in the current decompression cycle, wherein the first select is generated in response to a second token indicating that uncompressed data represented by the second token includes the first symbol, and wherein the first symbol is not in the combined history window.

220. The cellular telephone of claim 219, further comprising copying a second select being generated for the first token to the first select, wherein the second select points to one of a symbol in the combined history window or a data byte in the combined history window.